

## CLAIMS

1. A method for managing a configuration of a host adapter for a computer, the host adapter allowing communication between the computer and a peripheral device  
5 connected to the host adapter, the method comprising:

generating a graphical user interface, the graphical user interface being configured to allow a user to access configuration settings of the host adapter;

managing the configuration settings of the host adapter by way of the graphical user interface to create configuration changes, the configuration changes being saved to a  
10 file in a storage location;

rebooting the computer;

reading the configuration changes saved to the file in the storage location, the reading being performed during the rebooting of the computer;

writing the configuration changes to a nonvolatile memory of the host adapter of  
15 the computer; and

activating the configuration changes for the host adapter during the rebooting of the computer.

2. A method for managing a configuration of a host adapter for a computer as  
20 recited in claim 1, further comprising:

informing the user that the setting changes will not be available until the rebooting of the computer is complete; and

prompting the user to execute a reboot command.

3. A method for managing a configuration of a host adapter for a computer as recited in claim 1, wherein the managing the configuration of the host adapter includes:

determining what peripheral devices are connected to the host adapter.

5 4. A method for managing a configuration of a host adapter for a computer as recited in claim 1, wherein a host adapter icon represents the host adapter in the graphical user interface.

10 5. A method for managing a configuration of a host adapter for a computer as recited in claim 4, further comprising:

selecting the host adapter icon in the graphical user interface, the selecting of the host adapter icon being configured to provide access to the host adapter; and

15 selecting the host adapter icon in the graphical user interface, the selecting of the host adapter icon being configured to provide access to the peripheral devices connected to the host adapter.

6. A method for managing a configuration of a host adapter for a computer as recited in claim 5, wherein the selecting of the host adapter icon provides access to the configuration settings of the host adapter.

20 7. A method for managing a configuration of a host adapter for a computer as recited in claim 5, wherein the selecting of the host adapter icon provides access to diagnostic tools for managing the configuration of the host adapter.

8. A method for managing a configuration of a host adapter for a computer as recited in claim 1, wherein the host adapter is a SCSI host adapter

9. A method for managing a configuration of a host adapter for a computer as recited in claim 1, wherein a system BIOS of the computer reads the configuration changes saved to the file in the storage location.

10. A method for managing a configuration of a host adapter for a computer as recited in claim 1, wherein the storage location is defined in storage associated with one of a hard drive of the computer and a memory chip.

11. A method for managing the configuration of a host adapter for a computer as recited in claim 10, wherein the system BIOS writes the configuration changes to an EEPROM of the host adapter.

12. A method for accessing and managing a configuration of a host adapter for a computer, the host adapter providing communication between the computer and a peripheral device connected to the computer, the method comprising:

generating a graphical user interface;

accessing and managing the configuration of the host adapter by way of the graphical user interface, the accessing and managing of the configuration including making changes to the configuration;

saving the changes to the configuration to a registry key;

receiving a command to reboot the computer;

executing the command to reboot the computer and initiating a reboot operation;  
reading the changes to the configuration saved to the registry key during the  
reboot operation; and

writing the changes to the configuration to a nonvolatile memory of the host  
5 adapter of the computer.

13. A method for accessing and managing a configuration of a host adapter for  
a computer as recited in claim 12, wherein the initiating of the reboot operation includes  
shutting down all applications and all system devices.

14. A method for accessing and managing a configuration of a host adapter for  
a computer as recited in claim 13, wherein the reading of the changes to the configuration  
saved to the registry key is by a device driver at Ring 0 after the shutting down of all  
applications.

15. A method for accessing and managing a configuration of a host adapter for  
a computer as recited in claim 14, wherein the writing of the configuration changes to the  
nonvolatile memory of the host adapter of the computer is by the device driver at Ring 0  
after the reading of the changes to the configuration saved to the registry key.

16. A method for accessing and managing a configuration of a host adapter for  
a computer as recited in claim 15, wherein the reboot operation includes shutting down of  
an operating system after the writing of the configuration changes to the nonvolatile  
memory of the host adapter and then an executing of a boot sequence by a system BIOS.

17. A method for accessing and managing a configuration of a host adapter for a computer as recited in claim 16, further comprising:

reading the configuration of the host adapter with the configuration changes by the  
5 system BIOS during the boot sequence; and

initializing the computer and the host adapter in accordance with the configuration of the host adapter with the configuration changes.

18. A method for accessing and managing a configuration of a host adapter for  
10 a computer as recited in claim 12, wherein the host adapter is a SCSI host adapter.

19. A method for accessing and managing a configuration of a host adapter for a computer as recited in claim 12, further comprising:

generating a host adapter icon in the graphical user interface, the host adapter icon  
15 being configured to provide graphical user interface driven access to the host adapter and any device connected to the host adapter;

informing the user that the configuration changes will not be available until the reboot operation is complete; and

prompting the user to select the command to reboot the computer.

20

20. A method for enabling graphical user interface driven modifications of settings in an EEPROM associated with a SCSI host adapter connected to a computer, the method comprising:

displaying a graphical user interface, the graphical user interface providing a list of selectable configuration options;

receiving user selections of change options provided by the list of selectable configuration options;

5 writing the user selections to a storage location;

initiating a reboot of the computer;

writing the user selections from the storage location to the EEPROM; and

completing the rebooting, the SCSI host adapter being configured to operate in accordance with the user selections.

10 21. A method for enabling graphical user interface driven modifications of settings in an EEPROM associated with a SCSI host adapter connected to a computer as recited in claim 20, wherein the graphical user interface includes selections to initiate diagnostic testing of the SCSI host adapter.

15 22. A method for enabling graphical user interface driven modifications of settings in an EEPROM associated with a SCSI host adapter connected to a computer as recited in claim 20, wherein the storage location is defined in storage associated with one of a hard drive of the computer and a memory chip.

20 23. A method for enabling graphical user interface driven modifications of settings in an EEPROM associated with a SCSI host adapter connected to a computer as recited in claim 20, wherein the graphical user interface is displayed following a selection of a SCSI host adapter icon.

24. A computer readable media having program instructions for managing configuration settings of a SCSI host adapter for a computer, comprising:

program instructions for generating a graphical user interface, the graphical user interface being configured to allow a user to access the configuration settings of the SCSI host adapter;

program instructions for generating a functional SCSI icon configured to provide direct graphical user interface driven access to enable configuration settings modifications;

program instructions for selecting configuration settings modifications of the SCSI host adapter by way of the graphical user interface to create configuration changes, the configuration changes being saved to a file in a storage location;

program instructions for rebooting the computer;

program instructions for reading the configuration changes saved to the file in the storage location, the reading being performed during the rebooting of the computer;

program instructions for writing the configuration changes to a nonvolatile memory of the SCSI host adapter of the computer; and

program instructions for activating the configuration changes for the SCSI host adapter during the rebooting of the computer.

25. A computer readable media having program instructions for managing configuration settings of a SCSI host adapter for a computer as recited in claim 24, further comprising:

program instructions for displaying a SCSI host adapter icon, wherein the SCSI host adapter icon represents the SCSI host adapter in the graphical user interface;

program instructions for selecting the SCSI host adapter icon in the graphical user interface, the selecting of the SCSI host adapter icon being configured to provide access  
5 to the SCSI host adapter; and

program instructions for selecting the SCSI host adapter icon in the graphical user interface, the selecting of the SCSI host adapter icon being configured to provide access to the peripheral devices connected to the SCSI host adapter.

10 26. A computer readable media having program instructions for managing configuration settings of a SCSI host adapter for a computer as recited in claim 25, wherein the selecting of the SCSI host adapter icon provides access to the configuration settings of the SCSI host adapter.

15 27. A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer, comprising:

program instructions for providing a graphical user interface, the graphical user interface being configured to provide access to the configuration of the host adapter of the computer;

20 program instructions for managing the configuration of the host adapter of the computer by allowing a user to make changes to the configuration of the host adapter of a computer through the graphical user interface;

program instructions for receiving the changes to the configuration of the host adapter and writing the changes to a registry key;



program instructions for informing the user that a reboot operation is required for the changes of the configuration of the host adapter to be implemented;

program instructions for providing the user with a reboot command and for prompting the user to execute the reboot command;

5           program instructions for receiving the reboot command and initiating the reboot operation;

          program instructions for reading the configuration changes from the registry key;

          program instructions for flashing the configuration changes to an EEPROM of the host adapter of the computer; and

10           program instructions for completing the reboot operation by shutting down an operating system and starting a boot sequence.

28.       A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 27, wherein  
15       the initiating of the reboot operation includes shutting down all applications and all system devices.

29.       A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 28, wherein  
20       the reading of the changes to the configuration saved to the registry key is by a device driver at Ring 0 after the shutting down of all applications.

30.       A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 29, wherein

the writing of the configuration changes to the nonvolatile memory of the host adapter of the computer is by the device driver at Ring 0 after the reading of the changes to the configuration saved to the registry key.

5           31.     A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 30, wherein the reboot operation includes shutting down of an operating system after the writing of the configuration changes to the nonvolatile memory of the host adapter and then an executing of a boot sequence by a system BIOS.

10

          32.     A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 31, further comprising:

15

          program instructions for reading the configuration of the host adapter with the configuration changes by the system BIOS during the boot sequence; and

          program instructions for initializing the computer and the host adapter in accordance with the configuration of the host adapter with the configuration changes.

20

          33.     A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 27, wherein the host adapter is a SCSI host adapter.

34. A computer readable media having program instructions for accessing and managing a configuration of a host adapter of a computer as recited in claim 27, further comprising:

5 program instructions for generating a host adapter icon in the graphical user interface, the host adapter icon being configured to provide graphical user interface driven access to the host adapter and any device connected to the host adapter;

program instructions for informing the user that the configuration changes will not be available until the reboot operation is complete; and

10 program instructions for prompting the user to select the command to reboot the computer.